



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,028	07/03/2001	Hisashi Hotta	018995-445	9172

7590 07/30/2003
Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

WALKE, AMANDA C

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 07/30/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-7

Office Action Summary

Application No.

09/897,028

Applicant(s)

HOTTA ET AL.

Examiner

Amanda C Walke

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1752

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The present claim 1 has been amended to recite that the aqueous solution "essentially comprises" a nitrite group containing or fluorine group containing compound, while still requiring that the solution comprise a compound from the group consisting of nitrite group containing compound, fluorine group containing compound, or a phosphorous group containing compound. This "essentially comprises" language is not utilized in the specification, and it is unclear to the examiner as to whether this statement present any further limitations. For example, does "essentially comprises" limit the solution to only comprising either a nitrite or fluoride group containing compound, or may other compound such as the phosphorous atom containing compound be present as well, as long as the nitrite or fluoride group containing compound is a component? For purposes of examination, the claim language has been interpreted as requiring that a nitrite or fluorine group containing compound is present in the solution.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6, 8, 9, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomita et al (5,110,710).

Tomita et al disclose a light sensitive lithographic printing plate comprising a support that has been treated with an aqueous solution containing nitrites. The support comprises an anodized aluminum or an aluminum alloy that has been pre-treated by an aqueous solution comprising at least one of nitric acid, nitrate, nitrous acid, and nitrite. Preferred examples of the compound used in the solution include ammonium nitrite, and nitrite metal salts as described in column 3, lines 10-35. These compounds are present in the solution in an amount of 0.01 to 2% by wt, and the examples employ nitrite group-containing compounds. The support has coated thereon a positive-working light sensitive layer that is exposed then developed. The support may have a primer layer coated thereon prior to the coating of the photosensitive layer (column 4, lines 42-48) The developer employed is an alkali aqueous solution that preferably comprises one of 8 disclosed compounds, 6 of which are not silicate-containing compounds, thus it is specifically contemplated by the reference to employ a developer that does not contain a silicate (column 10, lines 5-15). The plate of Tomita results in high press life of the plate and non-image portions which are free of stain (column 2, lines 35-42).

Art Unit: 1752

With respect to the limitations for the formulas, it is noted by the examiner that the presently claimed formulas need only be met when the at least one compound is a fluorine-containing compound.

5. Claims 1, 3, 4, 8, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Dhillon et al (5,834,129) in view of Steppan (3,849,392) which is incorporated by reference by the primary reference.

Dhillon et al disclose a grained and anodized aluminum support for lithographic printing plates. Prior to the coating/ deposition of the photosensitive layer, exposure, and development, the support is anodized by a solution comprising phosphoric acid in a concentration of about 100 to 300 g/l, and treated with a solution that preferably comprises metal fluorides, alkali silicates, or K_2ZrF_6 in a preferred concentration of 0.01 to 10 % by volume (column 3, lines 1-32 and column 4, lines 26-36).

With respect to the limitation of the present claim 1 for the formulas that should be met when a fluorine-containing compound is used or when a phosphorous atom containing compound is used, on page 10 of the specification it is taught that the fluorine-containing compound should be present in an amount of .001 to 100 g/l and on page 11, it is taught that the phosphorous atom containing compound should be present in an amount of 50-100 g/l. Given the teachings of the reference that the fluorine-containing compound (K_2ZrF_6) and the phosphoric acid are used in amounts that appear fall within the range taught by the present specification as being amounts that would cause the presently claimed formulas to be met, it is the position of the examiner that when prepared, the aluminum support would have a surface which would satisfy the two presently claimed formulas.

Art Unit: 1752

The developer may comprise phosphates, silicates, or metabisulfites, alkali metal hydroxides, and surfactants, buffers, and other ingredients well known in the art (column 4, lines 57-65). The developer in the examples comprises potassium hydroxide (and no silicate).

Dhillon incorporates Steppan et al (3,849,392) by reference for teachings of suitable materials. The Steppan reference discloses a positive-working light sensitive layer (see for example, examples 39 and 70).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Dhillon, or Tomita et al in view of Nakanishi et al (5,837,425).

Dhillon et al and Tomita et al have been discussed above but fail to teach the use of a developing solution that comprises at least one sugar selected from non-reducing sugars and at least one base (except for silicate) having a pH ranging from 9.0 to 13.5.

Nakanishi et al disclose a developer suitable for use in developing both positive and negative working photosensitive lithographic printing plates. The developer comprises at least one compound selected from the group consisting of sugars, oximes, phenols, and fluorinated alcohols which have a buffering effect in the pH range of 11.5 to 13.5 and at least one alkali agent that may

Art Unit: 1752

be sodium hydroxide, potassium hydroxide, or lithium hydroxide. Sodium hydroxide and potassium hydroxide are used in the examples as is sucrose (saccharose), which is listed in the present specification as a preferred non-reducing sugar (abstract, column 3, line 16 to column 5, line 65 and the examples). The reference teaches that this developer is excellent in consistency in developability but also does not generate solid matter when used in an automatic processor (column 3, lines 24-17).

The Tomita et al reference teaches in column 10, lines 5-15, that a preferred developing solution may comprise an alkali aqueous solution that preferably comprises one of 8 disclosed compounds, but further teaches that other known compounds may be employed (column 10, lines 5-19).

Therefore, given the teachings of the secondary reference and the teaching of Tomita that the developing solution may contain compounds that are known other than their preferred compounds, it would have been obvious to one of ordinary skill in the art to prepare a printing plate by the method of Tomita et al choosing to develop the plate by employing the developer solution of Nakanishi et al to achieve excellent consistency and developability with reasonable expectation of achieving a plate having high press life of the plate and non-image portions which are free of stain.

Dhillon et al teaches that the developer may comprise phosphates, silicates, or metabisulfites, alkali metal hydroxides, and surfactants, buffers, and other ingredients well known in the art (column 4, lines 57-65). The developer in the examples comprises potassium hydroxide (and no silicate).

Art Unit: 1752

Therefore, given the teachings of the secondary reference and the broad teaching of Dhillon et al that the developer (which preferably comprises the potassium hydroxide base) may contain other known additives, it would have been obvious to one of ordinary skill in the art to prepare a printing plate by the method of Dhillon choosing to develop the negative working plate by employing the developer solution of Nakanishi et al comprising the combination of the metal hydroxide base and the non-reducing sugar to achieve excellent consistency and developability with reasonable expectation of achieving a plate having greater image contrast.

Allowable Subject Matter

9. Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or suggest to one of ordinary skill in the art to prepare a printing plate of the present claim 8 wherein there is an intermediate layer comprising a polymer compound having an acid group and an onium group.

Response to Arguments

10. Applicant's arguments filed 5/20/2003 have been fully considered but they are not persuasive.

Applicant has argued that the Tomita reference fails to anticipate the present claims because the developer employed in its examples comprises silicate. As discussed in the rejection above (and in the previous office action), the reference specifically contemplates 8 developers, 6

Art Unit: 1752

of which do not comprise a silicate. Thus, while the examples may employ a silicate containing developer, given the teachings of the reference, one of ordinary skill in the art would have immediately envisaged employing a developer that does not comprise a silicate.

Additionally, applicant has argued that the Tomita reference fails to teach one to expect the advantages recognized by the instant invention. The rejection of Tomita is a 102 rejection, thus given that the solution and plate of Tomita meets the present claim limitations, it is not necessary for the reference to provide the same reasons why the solution is made/ used.

Applicant has argued that Dhillon fails to anticipate the present claims because its examples do not employ the fluorides taught in the body of the specification of the reference. The reference teaches that it is *preferred* for the support to be treated with the fluoride compounds. Therefore, while they are not employed in the examples, the given the teachings of the reference, one of ordinary skill in the art would have immediately envisaged treating the support with a solution containing the fluoride compounds.

Additionally, applicant argued that this reference also fails to teach one to expect the advantages recognized by the instant invention. The prima facie case of obviousness is not undermined simply because applicant's motivation for teaching to treat the support with a fluoride-containing solution differs from that of the prior art's motivation. In re Dillon, 919 F.2d 688, 692-93, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (in banc), cert. Denied, 500 U.S. 904 (1991).

Applicant has argued on page 30 of the present specification that the instant examples demonstrate that unexpected results are obtained when a developer that does not contain a silicate is employed in the place of one that does. As discussed above, the Tomita

Art Unit: 1752

reference specifically contemplates 8 developers, 6 of which do not comprise a silicate, and adds that other known compounds may be employed. Thus, while the examples may employ a silicate containing developer, given the teachings of the reference, one of ordinary skill in the art would have immediately envisaged employing a developer that does not comprise a silicate, and would have been motivated to modify the reference employing another known developer that also does not contain a silicate.

Applicant's arguments have been considered, but are not persuasive for the reasons above with respect to the Tomita and Dhillon references, thus the examiner maintains her position. The arguments with respect to the Walls reference are persuasive, thus those rejections have been dropped.

The amendment to the specification are proper and have been entered.

Applicant's amendments have overcome the 35USC 112 rejections, and the rejections have been dropped.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

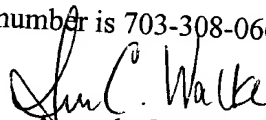
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C Walke whose telephone number is 703-305-0407. The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Amanda C Walke
Examiner
Art Unit 1752

ACW
July 28, 2003


JANET BAXTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700